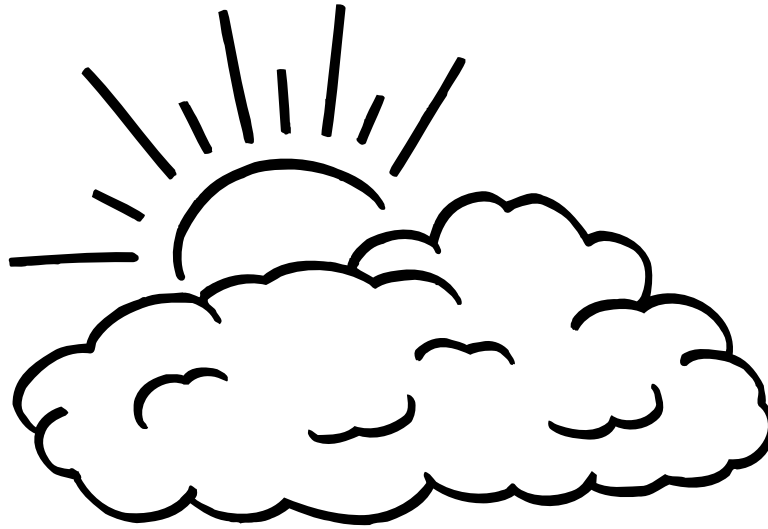


**TRANSPORTATION FUND
FOR
CLEAN AIR**

**REPORT ON FY 2001/2002
ALLOCATIONS AND EFFECTIVENESS**

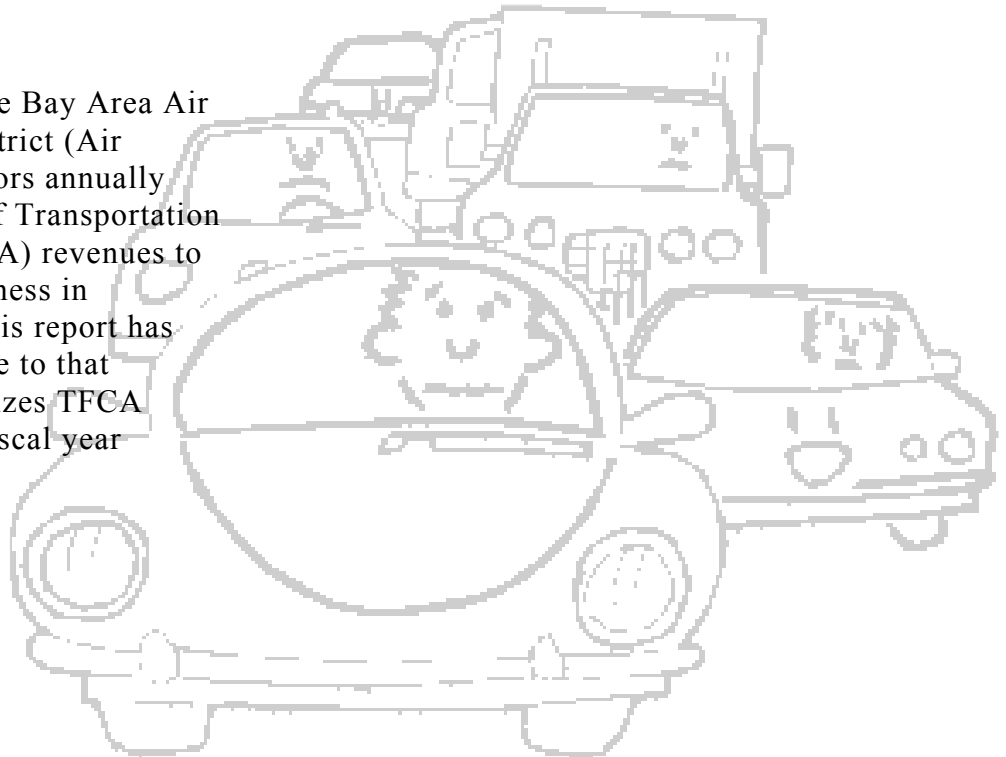


Bay Area Air Quality Management District
939 Ellis Street, San Francisco, CA 94109

April 2002

Summary

State law requires that the Bay Area Air Quality Management District (Air District) Board of Directors annually review the expenditure of Transportation Fund for Clean Air (TFCA) revenues to determine their effectiveness in improving air quality. This report has been prepared in response to that requirement and summarizes TFCA funding allocations for fiscal year 2001/02 (FY 01/02).



Major findings of this report are:

- ♦ **TFCA funds have been allocated to eligible recipients for eligible projects consistent with the legislation which authorizes the TFCA program.**
- ♦ **In FY01/02, the Air District approved TFCA funding of \$27.6 million for eligible projects and programs: \$19.5 million in Regional Funds (33 projects), \$8.1 million in Program Manager Funds (64 projects).**
- ♦ **The approved \$27.6 million in TFCA funds for FY 01/02 includes \$21.6 million in CY 2001 DMV receipts, \$2.2 million in interest, and \$3.8 million in TFCA funds reallocated from previously funded projects that were either canceled or completed under budget.**
- ♦ **The estimated lifetime emission reductions for the FY 01/02 funded projects are 492 tons of reactive organic gases (ROG), 702 tons of oxides of nitrogen (NOx), and 139 tons of particulate matter (PM). Combined lifetime emission reductions for the three pollutants total 1333 tons.**
- ♦ **The overall cost-effectiveness of all TFCA projects funded in FY 01/02 is \$20,733 TFCA dollars per ton of emissions reduced (lifetime ROG, NOx, and PM).**
- ♦ **Since the inception of the TFCA program in 1992, the TFCA has allocated a total of \$201 million to 1376 projects.**

The Challenge

On-road motor vehicles, including cars, trucks, and buses, are the most significant source of air pollution in the San Francisco Bay Area. Vehicle emissions contribute to unhealthful levels of ozone (summertime "smog") and particulate matter.

To protect public health, the State Legislature enacted the California Clean Air Act in 1988. In response, the Air District, in cooperation with the Metropolitan Transportation Commission and the Association of Bay Area Governments, prepared the *Bay Area Clean Air Plan (CAP)*. To reduce the emissions from motor vehicles, the *CAP* contains transportation control measures (TCMs) and mobile source measures. A TCM is defined as "any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions." Mobile source measures generally encourage the retirement of older, more polluting vehicles and the introduction of newer, less polluting motor vehicle technologies.

One Solution

To fund the implementation of TCMs and mobile source measures, the State Legislature allows air districts to impose a surcharge on motor vehicle registration fees paid within their jurisdictions. For the San Francisco Bay Area, the annual surcharge is \$4 per vehicle and applies to over 5 million vehicles registered in the region.

Revenues raised by the surcharge are allocated by the Air District through the Transportation Fund for Clean Air (TFCA). TFCA funds may only be awarded to public agencies, such as cities and counties, the Metropolitan Transportation Commission, transit districts, and public schools.

TFCA projects have many benefits:

- ♦ Reduce air pollution, including air toxics, such as benzene
- ♦ Conserve energy and help reduce global warming by reducing carbon dioxide emissions
- ♦ Reduce water pollution by decreasing contaminated runoff from roadways
- ♦ Reduce traffic congestion

State legislation restricts Bay Area TFCA funding to the following types of projects:

- ♦ **Implementation of ridesharing programs**
- ♦ **Clean fuel school and transit bus purchases or leases**
- ♦ **Feeder bus or shuttle service to rail and ferry stations and to airports**
- ♦ **Arterial traffic management**
- ♦ **Rail-bus integration and regional transit information systems**
- ♦ **Demonstrations in congestion pricing of highways, bridges and public transit**
- ♦ **Low-emission vehicle projects**
- ♦ **Smoking vehicles program**
- ♦ **Automobile buy-back scrappage program**
- ♦ **Bicycle facility improvement projects**
- ♦ **Physical improvements that support "Smart Growth" projects**

The Process

In calendar year 2001, \$21 million in new funding was received from the \$4 surcharge on motor vehicle registrations. Additional funds were available from earned interest and from prior projects completed under budget, withdrawn or canceled.

Each year the Air District distributes TFCA funds through **two processes**.

➤ **Sixty percent** of the TFCA funds are referred to as “Regional Funds.” The Regional Funds are used to fund eligible programs that are implemented by the Air District, such as the smoking vehicle and the vehicle buy-back programs. The remainder of the Regional Funds are distributed to public agencies through a competitive process.

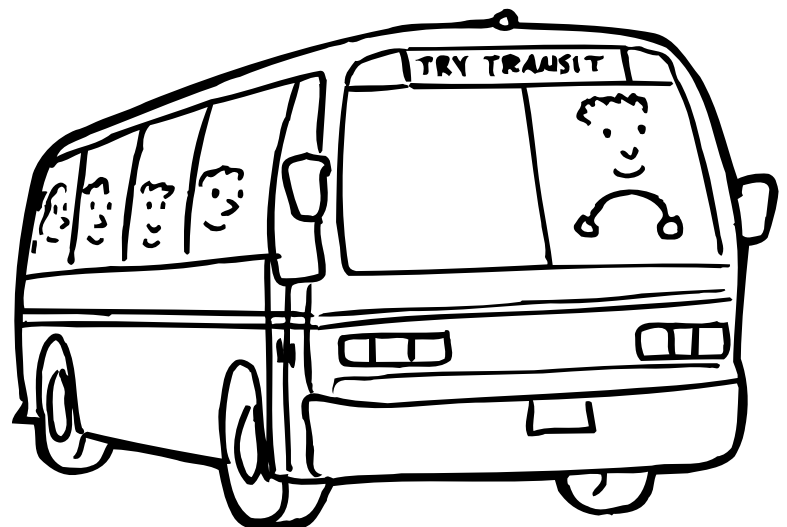
The Air District Board of Directors adopts criteria to evaluate and rank project applications for TFCA Regional Funds. Proposed projects are evaluated with respect to each criterion, and points are awarded. Projects are ranked and allocated funding based upon their total point score. The evaluation criteria for FY 2001/02 are shown below.

Cost-effectiveness, expressed in terms of TFCA dollars per ton of reduced emissions, is the most important criterion for ranking projects. Board-adopted policy requires that all projects must achieve a cost-effectiveness of \$50,000 per ton or better (TFCA \$\$ per ton).

➤ **Forty percent** of the funds generated in each Bay Area county are returned to the county’s designated Program Manager, as mandated by the State Legislature. The 40% funds are referred to as “Program Manager Funds.” Program Managers use their own criteria to select projects for funding. Program Managers who have a competitive grant application process also use cost-effectiveness as a criterion for project selection. In some counties, all or a portion of the Program Manager TFCA funds are allocated by formula as a direct subvention to cities within the county. For these funds, the city selects an eligible project or projects to receive TFCA funding. The recommended projects are submitted to the Air District Board of Directors for approval.

Scoring Criteria:

<i>FY 2001/02 Regional Funds</i>	<i>Points</i>
TFCA Funding Effectiveness	60
Other Project Attributes	15
Clean Air Policies and Programs	10
Disadvantaged Community	10
Promote Alternative Transportation Modes	5
Total	100



Projects

In FY 2001/02, the TFCA program awarded \$27.6 million in grants. We awarded \$19.5 million in Regional Funds to support 33 projects. The Regional Fund allocations included \$9.3 million for projects administered by the Air District (Appendix A) and \$10.2 million in grants to other agencies (Appendix B). Grants totaling \$8.1 million in Program Manager Funds were awarded to support 64 local projects (Appendix C).

Clean air vehicle projects, including school/transit buses and other electric and natural gas vehicles, as well as fueling infrastructure, received 42% of the total TFCA funds awarded. **Shuttle and feeder bus projects**, connecting people between home, transit, and work, received 12% of the total available funding. **Ridesharing projects**, which provide services and incentives to encourage people to use a commute alternative, received 16% of the funding. **Bicycle facilities**, including bike lanes, paths, and routes, and bicycle lockers and racks, received 4% of the total funds. Projects in the new **smart growth** category (pedestrian and traffic calming projects), received nearly 2% of the funds. **Arterial management projects**, including signal timing to smooth traffic flow received about 7%.

Category	# of FY 01/02 Projects	FY 01/02 TFCA\$	% of 01/02 TFCA \$	Emission Reductions, (tons) ⁽²⁾	% of Emission Reductions
Administration	10 ⁽¹⁾	\$1,218,960	4.4%	na	na
Smoking Vehicle	1	\$545,864	2.0%	60	5%
Vehicle Buy Back	1	\$2,284,977	8.3%	372	28%
Vehicle Incentive Program	5	\$1,311,000	4.7%	42	3%
Spare the Air	1	\$649,426	2.3%	20	1%
Trip Reduction/Ridesharing	18	\$4,273,748	15.5%	181	13%
Smart Growth	2	\$550,000	2.0%	13	1%
Arterial Management	8	\$1,899,000	6.9%	62	5%
Bicycle Facilities	19	\$1,182,047	4.3%	49	4%
Shuttles	11	\$3,369,273	12.2%	111	8%
Transit Buses	8	\$3,921,396	14.2%	248	19%
School Buses	2	\$3,920,000	14.2%	80	6%
Natural Gas Vehicles	2	\$1,359,812	4.9%	95	7%
Infrastructure for CNG	8	\$1,142,500	4.1%	Na	na
Infrastructure for EV	1	\$9,000	0.0%	Na	na
T O T A L	97	\$27,637,003	100%	1333	100%

na= not applicable No direct emission reductions are attributed to Administration or to infrastructure for clean air vehicles.

(1)The Air District and each of the nine counties have an "Administration" component of their TFCA programs. These are shown as "projects" in this table in order to account for the total TFCA allocations.

Results

➤ Emission Reductions

For every project funded, the Air District estimates the emissions reduced over the life of the project. The potential of each project to reduce motor vehicle emissions varies considerably depending upon the type of project, the scale of the project, geographic location and other factors. For example, shuttle projects are most effective when shuttle ridership is high and the riders were previously driving alone for their commute trip; emission reductions for clean air vehicle projects are highly dependent upon vehicle use, i.e. annual miles of travel, etc.

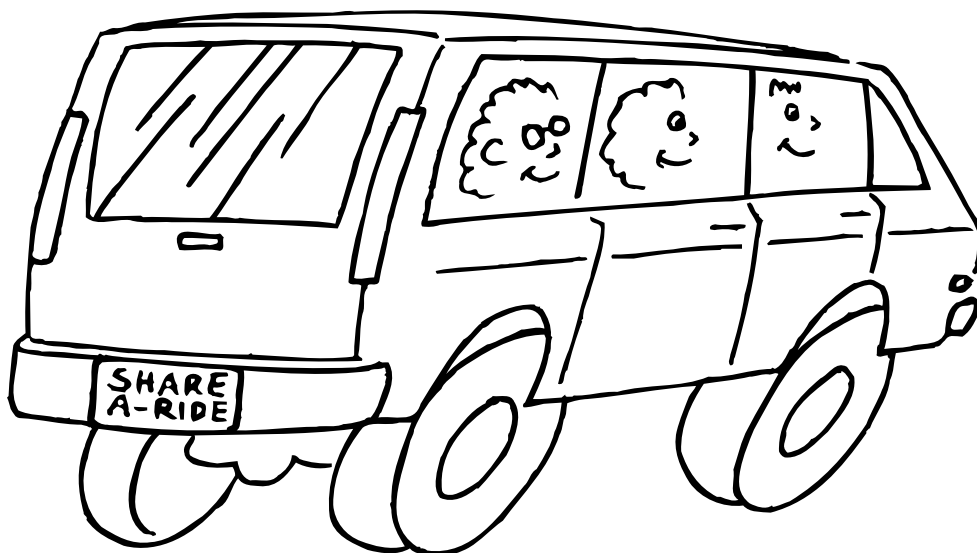
The total lifetime emission reductions expected from the implementation of projects receiving TFCA funding in FY 01/02 is 1333 tons – the sum of ozone precursors (ROG and NO_x) and particulate matter. This includes 423 tons of emissions reduced from projects to replace heavy duty diesel engines.

➤ Effectiveness

One way to measure the effectiveness of the TFCA program is to divide the TFCA funding allocated to projects by their lifetime emission reductions (ROG, NO_x, and PM, combined). The result is TFCA dollars per ton of reduced emissions. The *overall* TFCA dollars per ton for FY 01/02 allocations is \$20,733 per ton. If administrative costs are excluded, the overall cost-effectiveness for TFCA projects in FY 01/02, based on direct project costs, improves to \$19,819 per ton.

➤ Projects

The appendices list all the projects that were allocated TFCA funding in FY 2001/02.



APPENDIX A: FY 2001/02 TFCA Funded Air District Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
01R00	BAAQMD	Administration	\$757,875
01R01	BAAQMD	Smoking Vehicle Program	\$545,864
01R02*	BAAQMD	Vehicle Buy Back Program	\$2,284,977
01R03	BAAQMD	Spare The Air	\$649,426
01R04*	BAAQMD	Vehicle Incentive Program	\$900,000
01R05*	BAAQMD	High Mileage Vehicle Incentive Program	\$300,000
01R43	BAAQMD	FY00/01 Low Emission School Bus Program	\$2,000,000
01R44	BAAQMD	FY01/02 Low Emission School Bus Program	\$1,920,000
		T O T A L	\$9,358,142

* Greater than 95% of the funds for the Vehicle Buy Back Program (Project 01R02) are “pass-through” funds from the Air District viewpoint. The money goes to vehicle owners and to contractors who implement the program. Similarly, all funds allocated to the Vehicle Incentive Program (Projects 01R04 and 01R05) are “pass-through” funds. The money goes to project sponsors to implement these projects.

APPENDIX B: FY 2001/02 TFCA Regional Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
01R32	AC Transit	Fuel Cell Vehicle Purchase -- 9 Transit Buses	\$1,000,000
01R31	Alameda County CMA	Arterial Management -- San Pablo Boulevard	\$500,000
01R08	City of Fairfield	Class 1 Bicycle Path (1.6 mi.) -- Linear Park	\$100,000
01R09	City of Fairfield	Arterial Management - Air Base Parkway, Texas Street, Travis Blvd., Pennsylvania Street	\$750,000
01R26	City of Hercules	Arterial Management -- Sycamore Drive and Refugio Valley Road	\$250,000
01R33	City of Novato	Class 2 Bicycle Lane -- Redwood Boulevard at Diablo/De Long Avenue	\$98,125
01R23	City of Oakland	Natural Gas Vehicle Purchase - 10 Refuse Trucks	\$394,812
01R41	City of Orinda	Traffic Calming -- Orinda Way Central Village North	\$350,000
01R34	City of Petaluma	Natural Gas Vehicle Purchase - 4 CNG transit buses	\$300,000
01R12	City of San Leandro	West San Leandro Shuttle	\$147,000
01R30	City of San Mateo	Arterial Management - East Hillsdale Boulevard	\$71,000
01R13	City of Union City	Natural Gas Vehicle Purchase -- 2 Transit buses	\$300,000
01R10	City of Walnut Creek	Bicycle racks -- 200 bicycle capacity	\$10,000
01R19	County of Alameda	Class 2 Bicycle Lane (1.0 mi.)	\$70,000
01R20	County of Alameda	Arterial Management - Hesperian Boulevard & Redwood Road	\$45,000
01R29	County of Marin	Class 2 Bicycle Lane (0.4 mi.) - Ranchitos Road	\$110,000
01R35	County of San Francisco	Natural Gas Vehicle Purchase - 15 LNG/Diesel Class 8 trucks	\$965,000
01R18	Golden Gate Bridge , Highway & Transportation District	Fuel Cell Vehicle Purchase -- 3 Transit Buses	\$450,000
01R24	Livermore/Amador Valley Transit Authority	Ridesharing -- Tri-Valley School Pass Program	\$45,000
01R06	Metropolitan Transportation Commission	Regional Rideshare Program	\$1,000,000
01R14	Peninsula Corridor Joint Powers Board	Caltrain Shuttle Bus Service - Existing Routes	\$826,205
01R11	San Jose State University -- Associated Students, Inc.	Campus Ridesharing Program	\$150,000
01R38	Santa Clara Valley Transportation Authority	Fuel Cell Vehicle Purchase -- 3 Transit Buses	\$1,000,000
01R39	Santa Clara Valley Transportation Authority	Shuttle Bus Service -- ACE Commuter Rail	\$782,000
01R07	Sonoma County Transit	Natural Gas Vehicle Purchase -- 3 Transit buses	\$450,000
		T O T A L	\$10,164,142

APPENDIX C: FY 2001/02 TFCA Program Manager Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
01ALA00	Alameda County CMA	Administration	\$111,381
01ALA01	City of Alameda	Alameda Bicycle Water Taxi	\$35,600
01ALA02	City of Fremont	Citywide Arterial Management Program	\$165,500
01ALA04	City of Oakland	City of Oakland Bicycle Route Signage	\$102,546
01ALA05	City of Oakland	Bicycle Parking Request Program (City Racks III)	\$7,000
01ALA07	City of Oakland	EastLake Streetscape and Pedestrian Enhancement Program	\$200,000
01ALA08	City of Piedmont	City of Piedmont Public Facilities Bicycle Rack Program	\$5,000
01ALA09	City of Pleasanton	Citywide Trip Reduction Program	\$62,028
01ALA10	City of San Leandro	Arterial Management: Advanced Signal System	\$42,500
01ALA11	City of Union City	Compressed Natural Gas Fueling Facility	\$40,000
01ALA12	Metropolitan Transportation Commission	Regional Rideshare Program	\$107,555
01ALA13	Alameda County CMA	ACE Shuttle Service	\$185,000
01CC00	Contra Costa Transportation Authority	Administration	\$70,197
01CC01	County of Contra Costa	Regional Rideshare Program	\$347,295
01CC02	County of Contra Costa	Contra Costa Commute Alternative Network	\$952,798
01CC03	WCCTAC	I-580 Corridor Bicycle Gap Closure Project	\$63,577
01CC04	County of Contra Costa	Pleasant Hill BART Shuttle	\$54,388
01CC05	County of Contra Costa	Clean Fuel Vehicle Project	\$60,000
01MAR00	Marin County CMA	Administration	\$22,010
01MAR01	Marin County Transit District	Go Geronimo	\$8,500
01MAR02	County of Marin	Police Bicycles	\$2,000
01MAR03	County of Marin	Purchase Electric Parking Enforcement Vehicle	\$3,000
01MAR04	County of Marin	Inkwells Bridge/Pathway (Class 2 bikeway)	\$52,000
01MAR05	County of Marin	Tennessee Valley Road Pedestrian Path	\$31,199
01MAR06	County of Marin	Atherton Ave. Pathway (Class II)	\$134,000
01MAR07	City of San Rafael	Fifth Avenue Bike/Sidewalk Construction	\$92,000
01NAP00	Napa County Transportation Planning Agency	Administration	\$4,800
01NAP01	City of Napa	Downtown River Bicycle Trail Alternate	\$40,000
01NAP02	City of Napa	NVT/Vallejo Ferry Feeder Bus Connection	\$13,875
01NAP03	Metropolitan Transportation Commission	Regional Rideshare Program	\$33,509
01SC00	Santa Clara Valley Transportation Authority	Administration	\$124,105
01SC01	City of Palo Alto	Homer Avenue Caltrain Undercrossing	\$150,000
01SC02	City of Saratoga	Altrans K-12 Trip Reduction & School Bus	\$71,308

APPENDIX C: FY 2001/02 TFCA Program Manager Fund Projects

Proj#	Sponsor	Project Title	TFCA\$ Awarded
01SC03	Santa Clara Valley Transportation Authority	Light Rail Shuttle Bus Program	\$491,227
01SC04	City of Palo Alto	CNG Fueling Facility	\$300,000
01SC05	City of Sunnyvale	Mini Tube Trailer	\$17,500
01SC06	City of Sunnyvale	2 CNG Vehicles	\$9,000
01SC07	Metropolitan Transportation Commission	Regional Rideshare Program	\$652,000
01SF00	San Francisco County Transportation Authority	Administration	\$44,000
01SF01	County of San Francisco	Bicycles for Gardeners	\$28,000
01SF02	County of San Francisco	Electric Vehicles for Golden Gate Park	\$9,000
01SF03	County of San Francisco	Clean Air Vehicle Replacement	\$99,000
01SF04	County of San Francisco	Hall of Justice Shuttle	\$55,000
01SF05	County of San Francisco	Golden Gate Park CNG Fueling Facility	\$50,000
01SF06	County of San Francisco	Caltrain Bike Station	\$18,000
01SF07	County of San Francisco	Bicycle Parking Enforcement Program	\$57,000
01SF08	San Francisco MUNI	MUNI CNG Fueling Facility	\$500,000
01SF09	County of San Francisco	Cesar Chavez CNG Fueling Expansion	\$100,000
01SM00	San Mateo City/County Association of Governments	Administration	\$35,294
01SM01	SamTrans & Peninsula Congestion Relief Alliance	SamTrans Shuttle Bus Program & TDM/TSM Program	\$775,578
01SM03	City of Menlo Park	Off-Peak Shuttle	\$30,000
01SM04	County of San Mateo	Regional Rideshare Program	\$265,000
01SOL00	Solano Transportation Authority	Administration	\$18,366
01SOL01	City of Benicia	Pedestrian Access Improvements at Southampton Rd.	\$75,000
01SOL02	Solano Transportation Authority	Citylink Route 30 CNG Bus Service	\$14,650
01SOL03	Solano Commuter Information	Expanded Ridesharing/Vanpool Incentives	\$270,000
01SOL04	Solano Transportation Authority	Solano Electric Vehicle Infrastructure Program	\$9,000
01SOL05	City of Fairfield	City of Fairfield (Fairfield -Suisun Transit)	\$75,000
01SON00	Sonoma County Transportation Authority	Administration	\$30,932
01SON01	City of Santa Rosa	Student Pass Subsidy	\$80,000
01SON02	City of Santa Rosa	FY 2001 Voluntary Trip Reduction Program	\$149,255
01SON03	City of Santa Rosa	Para Transit Taxi Service	\$20,500
01SON04	Sonoma County Transit	Compressed Natural Gas Bus Purchase	\$406,746
01SON05	City of Rohnert Park	Commerce Blvd Bike Bridge	\$35,000
		TOTAL	\$8,114,719